

Notice of Allowability

Application No.

09/925,356

Applicant(s)

CHENG ET AL.

Examiner

Adolfo Nino

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 9/22/03.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 09 August 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

Allowable Subject Matter

Claims 1-17 are allowed.

The following is an examiner's statement of reasons for allowance:

The primary reason for the indication of the allowability of claims 1-8 is the inclusion therein of the limitation of "(c) oxidizing a surface of the remained metal layer by an anodic oxidization method for forming a metal oxide layer thereon such that an upper portion of the unoxidized remained metal layer is in the shape of plural conoids" in combination with the other claim limitations. This limitation was neither disclosed nor taught by the cited prior art, alone or in combination.

The primary reason for the indication of the allowability of claims 9-15 is the inclusion therein of the limitation of "(c) oxidizing a surface of the remained first metal layer by an anodic oxidization method for forming a metal oxide layer thereon such that an upper portion of the unoxidized remained first metal layer is in the shape of plural cylinders" in combination with the other claim limitations. This limitation was neither disclosed nor taught by the cited prior art, alone or in combination.

The primary reason for the indication of the allowability of claims 16-17 is the inclusion therein of the limitation of "(d) oxidizing a surface of the remained first metal layer by an anodic oxidization method for forming a metal oxide layer thereon such that an upper portion of the unoxidized remained first metal layer is in the shape of plural chimneys" in combination with the other claim limitations. This limitation was neither disclosed nor taught by the cited prior art, alone or in combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Potter (US 6,017,257) discloses a fabrication process for self-gettering electron field emitter. Suzuki (US 5,834,790) discloses a vacuum micro device. Barton et al. (US 6,617,772 B1) disclose a flat-panel display.

Response to Arguments

Applicant's arguments, see pages 3 and 4 of the REMARKS section of Amendment, filed 9/22/03, with respect to rejections to independent claims 1, 7, 9 and 16 have been fully considered and are persuasive. The rejection(s) under 35 USC 102(e) of claims 1 and 2 and the rejection(s) under 103(a) of claims 3-17 has been withdrawn. The Examiner agrees with the Applicants' argument that neither Zhang nor Cheng disclose, teach or suggest the anodic oxidation method.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (703) 305-1071. The examiner can normally be reached on M-F (7:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (703) 308-3682. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AN

 12/29/03
DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800